

Sunrise at Chuckwalla Dune Thicket. Photo by Bob Wick.

Overview of the Proposed Chuckwalla National Monument

The proposed Chuckwalla National Monument protects a vast area of connected habitat (660795 acres of BLM land) that supports rare fauna and flora, provides climate refugia and migration corridors, durably sequesters and stores carbon underground, and encompasses spectacular geologic features and nationally important historic sites.

The area of the Chuckwalla National Monument was home to the Iviatim (Cahuilla), Nüwü (Chemehuevi), Pipa Aha Macav (Mojave), and Kwatsáan (Quechuan) peoples, with numerous others traveling through the area. Several Indigenous groups, including Kwatsáan (Ft Yuma Quechan), Torres Martinez Desert Cahuilla, Twenty-Nine Palms Band of Mission Indians (Nüwü/Chemehuevi), and Colorado River Indian Tribes Mojave Council of Elders, support the monument proposal and will submit their own discussion of the values of the monument.

Within Chuckwalla are several areas set aside for wilderness conservation. However, they are separated by unprotected areas, do not include essential habitats, and are too small to provide complete ranges for species such as desert bighorn sheep. Designating the entire area as a

COXCOMB MOUNTAINS PINTO BASIN EAGLE MOUNTAIN PALEN Joshua Tree MOUNTAINS National Park мссоу COTTONWOOD MOUNTAINS MOUNTAINS CHUCKWALLA MECCA HILLS MOUNTAINS OROCOPIA MOUNTAINS MOUNTAINS LITTLE CHUCKWALLA CHOCOLATE MOUNTAINS MOUNTAINS RIVERSIDECOUNTY BLACK HILLS Anza-Borrego IMPERIAL COUNTY PALO VERDE Desert MOUNTAINS State Park Choc Mt Air Gnry Rng LITTLE MUL MOUNTAINS Chuckwalla Proposed National Monument California Department of Parks and Recreation Land Ownership Other State Joshua Tree National Park Special District US Bureau of Land Management City; County US Fish and Wildlife Service NGO Other Federal Department of Defense California Department of Fish and Wildlife

National Monument is the most effective way to conserve the nomadic species of the desert. It also creates the possibility of reintroducing the Federally endangered Sonoran desert pronghorn.

Especially important habitats within the monument include:

- Chuckwalla Bench, a raised area of coalescing alluvial fans that provides habitat and movement channels for multiple species, notably the Federally threatened Mojave desert tortoise and desert bighorn sheep. It is the habitat where Sonoran desert pronghorn could be reestablished, helping to stabilize their population.
- Microphyll woodland, composed of small-leaved trees such as desert ironwood, mesquite, and palo verde, is essential habitat for multiple species and especially for migratory birds. Microphyll woodland is 95% of desert habitat for migrating birds and essential habitat for resident birds; birds in arid habitat are declining steeply, making protecting this habitat a priority for avian conservation. The proposal area contains over 30% of the microphyll woodland in the 22.5 million acres of California desert covered by the Desert Renewable Energy Conservation Plan.

• Sand dunes provide habitat for the Mojave fringe-toed lizard, a California Species of Special Concern that is in decline.

The microhabitats of Chuckwalla support impressive biodiversity. Noteworthy species include:

- Burro deer, a nomadic, desert-adapted subspecies of mule deer whose ranges require riparian habitat, mountains, and corridors to move between them.
- The Eastern Peninsula subpopulation of mountain lion, another species requiring a large home range, vulnerable to habitat loss and fragmentation.
- Sixteen species of bats, which are important to pollination and insect pest control, among other benefits they provide to desert ecologies. Seven are BLM Sensitive species.
- The eponymous chuckwalla, culturally significant to many Indigenous Nations in the area.
- Gila Woodpecker, listed as California State Endangered, strongly associated with old-growth riparian habitat in the desert.
- Summer Tanager, a migratory bird declining in its historic California range along the Colorado River but successfully colonizing areas of the proposed monument.

The geology of the monument includes spectacular exposures of the San Andreas Fault and the smaller but striking Painted Canyon fault in the Mecca Hills; Precambrian gneiss that is among the oldest rock in California; the puzzling Orocopia Schist, whose journey from 20 miles under the surface to the heights of the Orocopia Mountains may illuminate how large bodies of rock go from mid-crust to the surface; the swift-moving Palen Dunes; and the alluvial washes that are so vital to the habitats of the area.

History preserved in the Monument includes historic mining sites of the southeastern California gold rush; the Bradshaw Trail, a route from the Salton Sea to the Colorado River that was important to the gold rush, and that can be retraced through the eastern stretch of the monument; and remnants of the Desert Training Center, which trained nearly 10% of the troops of World War II and was large enough to simulate an entire theater of operations. Desert training prepared American soldiers for the harsh environment of North Africa and the size of the center prepared American officers for generalship.

The varied habitats and linkages of the proposed monument make it important for climate resilience, providing climate refugia and migratory paths. The unique chemistry of desert soils also provides durable, natural underground carbon storage in caliche, the calcium carbonate created through the interaction of plants and fungi with alkali soils. The proposed monument also meets America the Beautiful goals of supporting tribal co-stewardship, expanding recreational access for underserved populations, protecting biodiversity, and sequestering carbon.



Enjoying the spectacular geology of the Mecca Hills. Photo by Bob Wick.

Given that the region is already experiencing ill effects from climate change, the area is threatened by any uses which would further impair wildlife movement in this region, including:

- changes to the existing agency management that would allow large-scale infrastructure development (e.g., renewable energy generation);
- industrial scale mining, because the area is not withdrawn from the 1872 Mining Law; and
- irresponsible or negligent recreational uses.

The area is managed by BLM, pursuant to the California Desert Conservation Area Plan. The most recent Plan amendment, which applies to most of the proposed monument, is the Desert Renewable Energy Conservation Plan. Notable management area types include

- California Desert National Conservation Lands, closed to energy development (CDNCLs)
- Areas of Critical Environmental Concern (ACECs)
- Wilderness areas
- Special Recreation Management Areas (SRMAs)
- General Public Lands

Although much of the area is managed for conservation, some management prescriptions, such as those for the ACECs, can be changed or removed, making the habitats of this area vulnerable to changing priorities. Designating the area a national monument would protect these essential habitats for future generations in a swiftly changing world.



Moon dipping behind San Jacinto Peak and the Orocopia Mountains. Photo by Bob Wick.